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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,346	07/25/2006	John Sharp	4936/ PCT	6601

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EXAMINER	
WONGWIAN, PHUTTHIWAT	
ART UNIT	PAPER NUMBER
3746	
MAIL DATE	DELIVERY MODE
09/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,346	SHARP, JOHN	
	Examiner	Art Unit	
	PHUTTHIWAT WONGWIAN	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 10-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/25/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Preliminary Amendment

1. This office action is responsive to preliminary amendment field on 07/25/2006. As directed by the amendment: claims 3-9 have been canceled, claims 10-17 has been added. Thus, claims 1-2 and 10-17 are presently pending in this application.

Priority

2. Receipt is acknowledged of a certified copy of the 102004023569.4 application referred to in the oath or declaration or in an application data sheet. If this copy is being filed to obtain the benefits of the foreign filing date under 35 U.S.C. 119(a)-(d), applicant should also file a claim for such priority as required by 35 U.S.C. 119(b). If the application being examined is an original application filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. See 37 CFR 1.55(a)(1)(i). If the application being examined has entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and Regulations of the PCT. See 37 CFR 1.55(a)(1)(ii). Any claim for priority under 35 U.S.C. 119(a)-(d) or (f) or 365(a) or (b) not presented within the time period set forth in 37 CFR 1.55(a)(1) is considered to have been waived. If a claim for foreign

priority is presented after the time period set forth in 37 CFR 1.55(a)(1), the claim may be accepted if the claim properly identifies the prior foreign application and is accompanied by a grantable petition to accept an unintentionally delayed claim for priority. See 37 CFR 1.55(c).

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because the abstract of the current application contains the word “the or”. It is suggested the word "the or" to be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-2 and 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S practice. They appear to be a literal translation to English from a foreign document and are **replete with grammatical and idiomatic errors.**

7. As to claims 1-2 and 10 -17, the limitation "the or" is unclear. Appropriate correction is required.

8. As to claims 1 and 11, the limitation “particularly” is unclear.

9. As to claim 2, the limitation “each generator into which each generator is integrated" is unclear, because the generator can not integrates within itself.

10. As to claim 10, the limitation “whereby for this purpose openings are integrated" is unclear.

11. As to claim 11, the limitation “from which shaft power is taken-off” is unclear.

12. As to claim 13, the limitation “and/or” is unclear, as best understood examiner, the claim interprets as "or".

13. As to claim 15, the limitation "each generator also electronic assemblies for closed loop power control of each generator" is unclear whether the applicant claims the electronic assemblies for each generator.

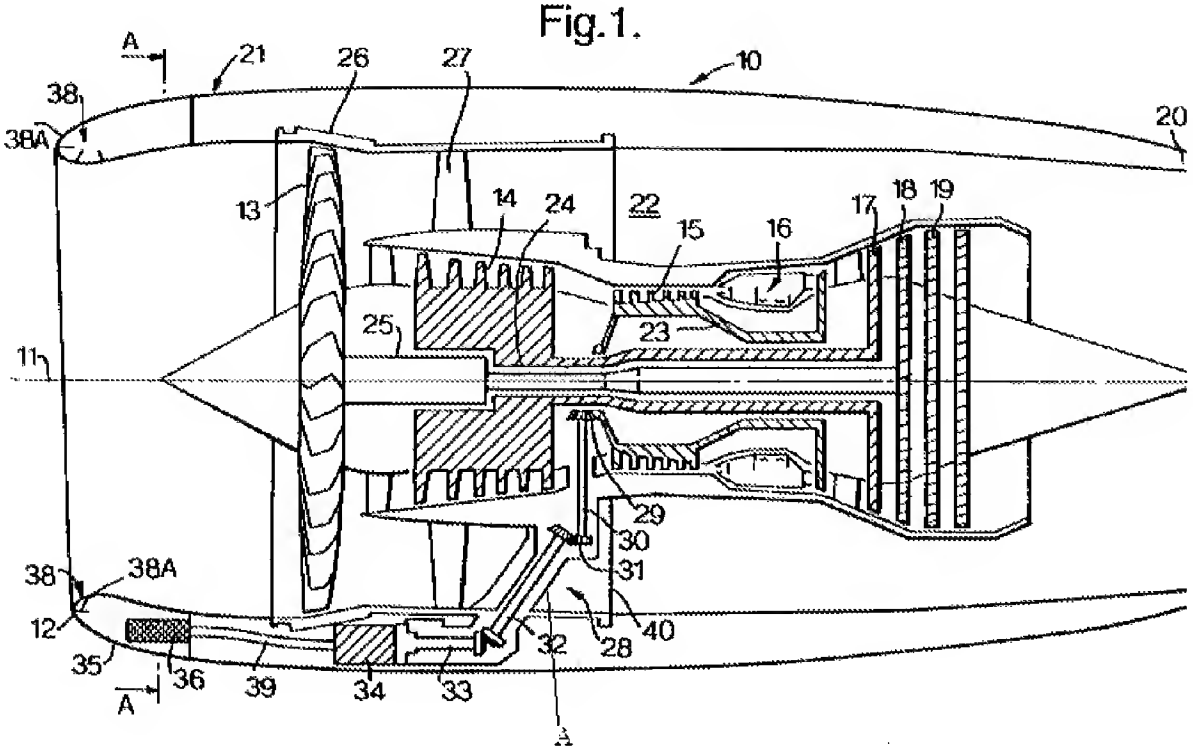
Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 2, 10, 11 and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Stretton (EP 1479889 A2).

Fig.1.



16. As to claim 1, Stretton discloses an aircraft engine, particularly a gas turbine engine (fig. 1), with at least one fan 13 (fig. 1) and a core engine (fig. 1, combustor and turbine section), whereby the fan comprises a fan housing 26 (fig. 1) enclosing a fan flow channel (fig. 1), and at least one fan wheel 13 (fig. 1), and whereby the core engine comprises at least one compressor 14, 15 (fig. 1), at least one combustion chamber 16 (fig. 1), and at least one turbine 17, 18, 19 (fig. 1), and with at least one generator 34 (fig. 1) for producing electrical energy, whereby each generator produces electrical energy (page 2, paragraph 24, line 45-47, "generating electricity once the engine has

been started") by withdrawing shaft power from the core engine (fig. 1, the generator draws the shaft power 30 from the core engine), characterized in that each generator 34 (fig. 1), for producing electrical energy, is integrated into at least one strut A (fig. 1 above, the generator 34 is integrated into the strut A via a shaft 32) extending in a radial direction (fig. 1 above) of the fan flow channel (fig. 1, the air flow through the fan channel through the intermediate pressure compressor 14, through the strut and then the generator), and thus is positioned within the fan flow channel.

17. As to claim 2, Stretton discloses each strut into which each generator is integrated is demountable out of the fan flow channel for maintenance work (fig. 1).

18. As to claim 10, Stretton discloses each generator is coolable by an air flow (fig. 1) flowing through the fan flow channel, whereby opening are integrated into each strut (fig. 1, there is an opening in each strut) in order to move a portion of the air flow (fig. 1, the air flow through the fan channel through the intermediate pressure compressor 14, through the strut and then the generator) flowing through the fan flow channel pass each generator for cooling (fig. 1, the air flow through the generator).

19. As to claim 11, Stretton discloses that each generator comprises at least one stator (fig. 1, the generator 34 has at least one stator such as the inner casing) and at least one rotor (fig. 1, since the gear 33 is connected to the generator to rotate the shaft in order to produces power, therefore, the generator has at least one stator), whereby each generator particularly the rotor, coupled at a radially inwardly (fig. 1, the generator assemblies coupled radially to the first gear box 31) positioned end through a first gear box 31 (fig. 1) with the shaft of the core engine from which shaft power taken-off.

20. As to claim 16, Stretton discloses each generator can also be used in a motor (page 1, paragraph 11) operation for starting the engine.

21. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Care (US Patent No. 6,729,140).

22. As to claim 1, Care discloses an aircraft engine, particularly a gas turbine engine (fig. 1), with at least one fan 12 (fig. 1) and a core engine (fig. 1, combustor and turbine section), whereby the fan comprises a fan housing (fig. 1) enclosing a fan flow channel (fig. 1), and at least one fan wheel 12 (fig. 1), and whereby the core engine comprises at least one compressor 28, 34 (fig. 1), at least one combustion chamber (fig. 1), and at least one turbine 30 (fig. 1), and with at least one generator 78 (fig. 1) for producing electrical energy, whereby each generator produces electrical energy by withdrawing shaft power from the core engine (fig. 1, the generator withdraw the shaft power from the core engine through the compressor blade 96a), characterized in that each generator 78 (fig. 1), for producing electrical energy, is integrated into at least one strut 80 (fig. 1 above) extending in a radial direction (fig. 1 above) of the fan flow channel, and thus is positioned within the fan flow channel.

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

24. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stretton in view of Care (US Patent No. 6,729,140).

25. As to claim 12, Stretton discloses the each stator is positioned in a fixed location (fig. 1, the stator is located within the generator, therefore, it is a fixed location). Stretton does not disclose that each stator is positioned in a fixed within the respective strut and each rotor rotates within the respective strut relative to each stator. However, Care teaches a generator 78 (fig. 2) is the radial generator located inside the strut 100 (fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Stretton's invention such that each stator is positioned in the fixed within the respective strut and each rotor rotates within the respective strut relative to each stator, as suggested and taught by Care, for the purpose of reducing the gear connection between the generator and the core engine, thereby reducing the cost of the engine.

26. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stretton in view of Johnston (US Patent No. 5,039,281).

27. As to claims 13 and 17, Stretton discloses the essential features of the claimed invention except the first gear box through which each generator is coupled to the shaft of the core engine is constructed as a rotational speed increasing gear box. However, Johnston teaches an accessory gear box 32 (fig. 1) is coupled to a rotational speed increasing gear box 60 (fig. 1). Therefore, it would have been obvious to one of ordinary

skill in the art at the time invention was made to modify Sretton's invention to include the first gear box through which each generator is coupled to the shaft of the core engine is constructed as the rotational speed increasing gear box, as suggested and taught by Johnston, for the purpose operating the generator the different speed than the main engine, thereby increasing power output from the generator.

28. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stretton in view of Cornet (US Patent No. 20010047647).

29. As to claim 14, Stretton discloses each generator is coupled at a radial outward end (fig. 1, the generator is coupled at the radial outward end of the fan flow channel) of the fan flow channel, through a second gear box 33 (fig. 1) but does not disclose that the generator attaches to pneumatic system of the aircraft engine. However, Cornet teaches a generator coupled to the pneumatic system of the aircraft engine (page 2, paragraph 31, "a generator, preferably coupled to the aircraft engine, or alternatively of a hydraulic or pneumatic system"). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to modify Stretton's invention to include the generator attaches to pneumatic system of the aircraft engine, as suggested and taught by Cornet, for the purpose of supplying the power to the pneumatic system of the aircraft.

30. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stretton in view of Johnston and further in view of Cazenave (Pub. No. US 20030126854).

31. As to claim 15, Stretton discloses the essential features of the claimed invention except each generator also electronic assembles for the closed loop power control of each generator, are integrated into the respective strut. However, Johnston teaches an auxiliary system 68 (fig. 1) is electronically assembles 86 (fig. 1, the APU is coupled to the controller and the sensor 90, therefore, it is electronic assembles) for closed loop power control. Cazenave teaches the pipe and harnesses are routed through the strut (fig. 2, and page 1, paragraph 5-6) for connecting to the generator. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Sretton's invention to include each generator also electronic assembles for the closed loop power control of each generator, are integrated into the respective strut, as suggested and taught by Johnston and Cazenave, for the purpose of controlling the power output rate from the generator, thereby the engine operates more efficient.

Conclusion

Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F. R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the

claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP 2163.06 II(A), MPEP 2163.06 and MPEP 714.02. The "disclosure" includes the claims, the specification and the drawings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUTTHIWAT WONGWIAN whose telephone number is 571-270-5426. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KRAMER C. DEVON can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. W./
Examiner, Art Unit 3746

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746